



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/735,668

12/16/2003

Dov Moran

246/234

2836

7590 03/22/2005

DR. MARK FRIEDMAN LTD.

C/o Bill Polkinghorn

Discovery Dispatch

9003 Florin Way

Upper Marlboro, MD 20772

EXAMINER

NORRIS, JEREMY C

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,668

Applicant(s)

MORAN, DOV

Examiner

Jeremy C. Norris

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,999,415 (Hamzehdoost).

Hamzehdoost discloses, referring to figure 3, an electronic module (100), comprising; electronic circuitry (132); first connection mechanism (solder ball pictured not specifically referenced), operationally connected to said electronic circuitry, for mounting of the electronic module by a first method; and a second connection mechanism (182), operationally connected to said electronic circuitry, for mounting of the electronic module by a second method different from said first method [**claim 1**], wherein said first method is robotic mounting and said second method is manual mounting [**claim 2**], wherein said first connection mechanism is directly operationally connected to said electronic circuitry [**claim 3**], wherein said second connection mechanism is directly operationally connected to said electronic circuitry [**claim 4**],

wherein said second connection mechanism is directly operationally connected to said electronic circuitry [**claim 6**].

Claims 1, 2 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,814,883 (Sawai).

Sawai discloses, referring to figure 1, an electronic module comprising; electronic circuitry (3); first connection mechanism (14), operationally connected to said electronic circuitry, for mounting of the electronic module by a first method; and a second connection mechanism (pads, shown along the bottom of the package but not specifically referenced), operationally connected to said electronic circuitry, for mounting of the electronic module by a second method different from said first method [**claim 1**], wherein said first method is robotic mounting and said second method is manual mounting [**claim 2**], wherein said first connection mechanism includes at least one substantially hemispherical solder ball (14) [**claim 8**], wherein said second connection mechanism includes at least one electrically conducting pad [**claim 9**], wherein said at least one solder ball and said at least one pad are like in number (see figure 1) [**claim 10**], further comprising: (d) for each said solder ball, and for a respective said pad, a respective wire (4) operationally connecting said each solder ball to said respective pad [**claim 11**].

Claims 1-3, 5, 7, and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,483,718 (Hashimoto).

Hashimoto discloses, referring to figures 1 & 2, an electronic module comprising; electronic circuitry (see figure 2); first connection mechanism (32), operationally connected to said electronic circuitry, for mounting of the electronic module by a first method; and a second connection mechanism (41), operationally connected to said electronic circuitry, for mounting of the electronic module by a second method different from said first method [**claim 1**], wherein said first method is robotic mounting and said second method is manual mounting [**claim 2**], wherein said first connection mechanism (32) is directly operationally connected to said electronic circuitry [**claim 3**], wherein said second connection mechanism (41) is operationally connected to said electronic circuitry via said first connection mechanism [**claim 5**].

Alternatively, Hashimoto discloses, referring to figures 1 & 2, an electronic module comprising; electronic circuitry (see figure 2); first connection mechanism (41), operationally connected to said electronic circuitry, for mounting of the electronic module by a first method; and a second connection mechanism (32), operationally connected to said electronic circuitry, for mounting of the electronic module by a second method different from said first method [**claim 1**], wherein said first connection mechanism (41) is operationally connected to said electronic circuitry via said second connection mechanism [**claim 7**], wherein said second connection mechanism includes at least one electrically conducting pad [**claim 12**], further comprising: an electrically insulating body (20) whereon said electronic circuitry, said first connection mechanism and said second connection mechanism are mounted [**claim 13**], wherein both said first

connection mechanism and said second connection mechanism are mounted on a common side of said body [claim 14].

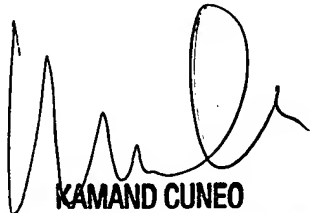
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCSN


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800